

Rethinking invasive strategies in old patients with NSTEMI

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Dear Madam, Cardiovascular diseases are a leading cause of mortality worldwide, in the year 2021 they made up nearly one-third of the deaths globally.¹ Developing countries, such as Pakistan, face a serious challenge when it comes to dealing with the burden of cardiovascular diseases. According to the 2019 Global Burden of Disease, Pakistan's age-standardized mortality rate was 357.88 per 100,000, which was greater than the Global average of 239.85 per 100,000, and its age-standardized incidence of CVD was 918.18 per 100,000 which was also greater than the Global average of 684.33 per 100,000.²

A study conducted in the United States accomplished that over the past years, the incidence of non-ST-segment elevation myocardial infarction (NSTEMI) in patients has been increasing compared to the number of patients who presented with ST-segment elevation myocardial infarction (STEMI).³ Compared to STEMI patients, NSTEMI patients utilized greater medical resources. Hospitalizations for NSTEMI patients were 26% greater, and Emergency room visits were 52% greater in comparison to individuals with STEMI.⁴ Individuals with NSTEMI also had numerous other complications and were older in general. Compared to STEMI patients, NSTEMI patients experienced higher rates of overall mortality, myocardial infarction, stroke, and death from cardiovascular causes.⁴

According to a recent study, where a randomized trial was carried out across the United Kingdom, concluded that there was no significant difference in mortality or nonfatal myocardial infarction over the next 4.1 years when opting for a cheaper conservative approach by using medicines while treating patients with NSTEMI over a much more costly invasive approach.⁵

In the case of Pakistan, the fifth most populated country in the world. Regional conflicts, natural disasters, and low

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government spending on healthcare have impeded health development despite the economic expansion. One of the increasing non-communicable diseases that our healthcare sector is now battling is cardiovascular disease.² Considering a conservative approach while managing NSTEMI in older persons can greatly reduce expenditures without compromising the patient's health. Invasive procedures like percutaneous coronary intervention and cardiac catheterization put a great toll on our healthcare system, this approach to employing conservative management can enable us to improve our resource allocation to the other fields, while not affecting the outcomes for old patients with NSTEMI.

Given the above, similar clinical trials should be conducted across Pakistan, as the conservative approach to managing old patients with NSTEMI in place of invasive procedures can be a cost-efficient yet safe alternative in Pakistan's financially constrained and cash-stripped healthcare system.

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